

Science

We are about to begin a study of objects in the sky - The Sun, Moon, and Stars. We'll start with the Sun and use a variety of tools to observe and record its position in the sky. We'll use a compass to orient our observations. We will also use the position and length of our shadows to monitor the position and movement of the Sun. While we use the language that the Sun rises in the east and sets in the west, we know that it really isn't the Sun moving but the rotation of the Earth on its axis gives the appearance that the stationary Sun is moving across the sky. We will be studying the predictable pattern of the Sun as it travels across the sky during the day and during the different seasons.




Then, we will study the Moon. We will start as a class by observing the Moon during the day and follow that up with night-sky observations. Since we aren't in school at night, this must be a homework assignment. As a bridge to what we have been studying in class, students will look for the Moon and other objects in the night sky when they are at home.

To make night-sky observations, take your child outside at about the same time each evening (when it's dark) and observe the sky. Take a few minutes to enjoy the night sky together. Talk about what you see. For example, if it's cloudy, just write down that it is cloudy. If it's clear, you will see stars (you might want to point out a constellation or two), planets (points of light that appear larger and brighter than stars), and sometimes the Moon. Discuss the changes in the night sky from night to night, especially the changing appearance of the Moon, and where you see it in the sky.

For this Science unit, your child needs to complete the following assignments:

1. **Night-Sky Log** : Have your child record "in Chinese" his or her observation in the Night-Sky Log. Please see attached. The due date will be the day after the last date of observation on your child's Night-Sky log calendar. To complete an entry, your child records the date and time. Have your child write a few sentences in Chinese about what he or she observed and draw a picture to show what the

Project Due Date: Tuesday, January 5th, 2016

<p>日期: <u>二二零一五年十月三日</u> 星期: <u>一</u> Time: <u>8:30 p.m.</u></p> <p>觀察 / Observation</p> <p>我看到一個橢圓形的月亮在東邊。 天空有很多星星，但是有一顆星星特別明亮。</p> <p>The Moon was oval. It was high in the sky. There were lots of stars. One star in the west was brighter than the rest.</p>	
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If you have an iPhone or iPad, you may want to download “Star Walk” to get a close up look of our night sky. “Star Walk” will enable you and your child to look at our night sky in real time.

3. Sundial (This is an optional extra-credit assignment) : Please assist your child to construct a sundial. A sundial is a timekeeping device that takes advantage of the Sun's predictable movement across the sky. The shadow cast by the gnomon in the center of the dial sweeps across the dial, marking the passage of time. Your child will use the concept to construct a simple sundial at home to bring this ancient technology to life.

What should be included in the sundial?

- a. Use Arabic number, Roman numerals or pictographs to indicate the time of the day. If your child uses pictographs, please create a legend to explain the correspondence of the time.
- b. The sundial should include cardinal directions: East 東, West, 西 South 南 and North 北.
- c. Please be as creative as you can in designing and decorating your sundial.
- d. The name of your child



Suggestions:

- If there is no time constraint, please allow your child an opportunity to construct his or her sundial through trial and error. He or she will have to figure out the position of the sundial that works best. Therefore, during the experiments, he or she can simply use a stick as a gnomon which can be glued onto a piece of cardboard to create a shadow. However, if time is an issue, here are some tips that will assist your child to complete his or her sundial.
 - a. You need a compass and protractor. The sundial works best at 38 degree N latitude, the latitude of San Francisco Bay, so your child needs to align the Noon end of the sundial towards the North.
 - b. You can fine-tune the sundial by comparing the time you see on the sundial to the time on your watch. If there is a difference, turn the sundial until the times nearly match.
 - c. After your successful trial, you can use the materials that you want to use for your final product.
 - d. During the construction of the sundial, reinforce the science concepts as mentioned early.
 - e. Find a sunny day so that there is ample sunlight to cast the shadow on the sundial throughout the day.
 - f. Find a place that is far away from buildings, trees or other objects that might cast shadows on your sundial

- g. Your sundial should not be bigger than 8x11 due to the limited space of our classroom
- h. Please use sturdy materials such as wood panel or thick cardboard. Also use wood glue or a glue gun rather than white glue.

Project Due Date: Thursday, February 4th, 2016

Please refer to our classroom website for student samples.

Social Studies

This trimester, we will start out with the economy of our region, your child will also study “Land and Water in Your Area.” Here are the main ideas that we are learning:

- Physical features such as deserts, mountains, and oceans make up our environment.
- The desert region has many flat, low areas.
- The valley region is flat, and rivers flow through it.
- The coast region has mountains, hills and cliffs.
- The mountain region has mountains and lakes.
- People use the things in our region to meet their needs.
- Sometimes people change the environment to help meet their needs.
- There are many reasons to protect environment.

Family Activities:

Discuss whether you live in a desert, coast, mountain, coast mountain, or valley region.
Which of your community’s features help you to know that?

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Learn Together

Help your child learn how people and their environments affect each other

- How has your family change your home (by rearranging furniture, for example) to improve the way you live? How is this similar or different to changing the environment of a region to meet people's needs?
- Draw a map of your home or a room in your home. On the map, show where different resources can found, such as flashlights, towels, food, or books.
- List how your family helps protect the environment (by recycling, for example). Then find out other ways you can help the environment and implement one of these ideas.

Read Together

Types of Maps, by Mary Dodson Wade. (scholastic Library Publishing ISBN 0-516-27768-5, 2003) Nonfiction

Letters Home from Yosemite, by Lisa Halvorsen. (Gale Group, ISBN 1-56711-462-8, 2000)

Dams, by Chris Oxlade. (Heineman Library, ISBN 1-57572-277-1, 2000) Nonfiction

Chinese Oral Language How-to Oral Presentation

The presentation is scheduled on the week of January 11th to January 15th.

The specific date of your child's oral presentation will be announced in your child's agenda.

Your child will give a "How to" oral presentation.

Things needed to be included in the presentation

- A brief introduction including your child's name and topic of presentation
- It has to be at least 3 minutes
- A clearly sequenced presentation by using transition words that will be reviewed in the class

Suggestions that your child can include in his or her oral presentation.

- [illegible]

[illegible]

Chinese Language Arts

In the second trimester, we will cover the following Chinese lessons

第四課 Lesson 4 - Oceanic World

第五課 Lesson 5 - A Scarf for Grandma

第六課 Lesson 6 - North Wind and the Sun

Chinese Grade Level Characters:

Acquiring new characters is challenging for students and it is even more difficult to retain them. Our goal for the second trimester is not only to acquire the new Chinese characters but also retain what your child has learned in the first trimester. Your child will be tested on all the characters including the first trimester and the second trimester.

[illegible]

Tests

Science tests are scheduled between each theme/topic. The specific test dates will be announced in the class and recorded in your child's agenda.

Sun, Moon and Stars unit test is scheduled for Friday, February 12th, 2016.

Social Studies :

The test for “Land and Water in Your Area” is scheduled for Friday, February 26th, 2016.

The Chinese Language Art Chinese character test:

- The second trimester, lessons 4, 5 and 6 dictation test is scheduled for Friday, March 4th, 2016.